oci 227	MOTICE NUCLEO	TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING OTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES
	he nucl comply v	eotide and/or amino acid sequence disclosure contained in this application does not vith the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the reason(s):
	X	 This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to these regulations, published at 1114 OG 29, May 15, 1990 and at 55 FR 18230, May 1, 1990.
		This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
		3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
	X	4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
		5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
		6. The paper copy of the "Sequence Listing" is not the same as the computer readable from of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
		7. Other:
Applicant Must Provide:		
	X	An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
	X	An initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification.
	X	A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).
	For	questions regarding compliance to these requirements, please contact:
	For For	Rules Interpretation, call (703) 308-4216 CRF Submission Help, call (703) 308-4212 entIn Software Program Support (SIRA)

PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR RESPONSE



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

RECEIVED

AUG 0 1 2002

TECH CENTER 1600/2900

Application Serial Number:	09/6/2,925B
Source:	1622
Date Processed by STIC:	2/24/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,

2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 3.1 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual ePAVE)
- U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
 Hand Carry directly to:
- U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
 - U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
- Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 09/6/29258
ATTN: NEW RULES CA	SES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
·lWrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220><223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220><223> section to the subsequent amino acid sequence. This applies to the mandatory <220><223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10 V Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
11Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13Misuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

AMC/MH - Biotechnology Systems Branch - 08/21/2001





1645

RAW SEQUENCE LISTING DATE: 07/24/2002 PATENT APPLICATION: US/09/612,925B TIME: 14:24:11

Input Set : A:\sequence listing.txt
Output Set: N:\CRF3\07242002\1612925B.raw

Output Set: N:\CRF3\07242002\1612925B.raw

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3 <110> APPLICANT: Cano, Carlos Antonio Durante
      4
              Nieto, Enrique Gerardo Guillen
      5
              Acosta, Anabel Alvarez
             Munoz, Luis Emilio Carpio
      7
             Vazquez, Diogenes Quintana
                                                                       Does Not Comply
      8
             Rodriguez, Carmen Elena Gomez Rodriguez
                                                                   Corrected Diskette Needec
      9
             Rodriguez, Recardo de la Caridad Siva
     10
             Galvez, Consuelo Nazabal
     11
             Angulo, Maria de Jesus Leal
             Dunn, Alejandro Miguel Martin
     14 <120> TITLE OF INVENTION: System for the Expression of Heterologous Antigens as Fusion
Proteins
    16 <130> FILE REFERENCE: LEXSA P-13DIV2
    18 <140> CURRENT APPLICATION NUMBER: 09/612,925B
    19 <141> CURRENT FILING DATE: 2000-07-10
    21 <150> PRIOR APPLICATION NUMBER: 08/930,917
    22 <151> PRIOR FILING DATE: 1997-09-16
    24 <150> PRIOR APPLICATION NUMBER: CU97/00001
    25 <151> PRIOR FILING DATE: 1997-01-17
    27 <160> NUMBER OF SEQ ID NOS: 21
    29 <170> SOFTWARE: PatentIn version 3.1
    31 <210> SEQ ID NO: 1
    32 <211> LENGTH: 47
    33 <212> TYPE: PRT
    34 <213> ORGANISM: Neisseria meningitidis
    36 <400> SEQUENCE: 1
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    39 1
                       5
                                            10
    42 Gly Gly His Glu Asn Val Asp Ile Ile Ala Val Glu Val Asn Val Gly
                   20
                                        25
    46 Asp Thr Ile Ala Val Asp Asp Thr Leu Ile Thr Leu Glu Thr Asp
    47
               35
    50 <210> SEQ ID NO: 2
    51 <211> LENGTH: 18
    52 <212> TYPE: PRT
    53 <213> ORGANISM: Neisseria meningitidis
    55 <400> SEQUENCE: 2
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    58 1
                       5
                                            10
    61 Ala Gly
    65 <210> SEQ ID NO: 3
    66 <211> LENGTH: 18
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68 <213> ORGANISM: Neisseria meningitidis

67 <212> TYPE: PRT

1 460 2 UI

RAW SEQUENCE LISTING DATE: 07/24/2002 PATENT APPLICATION: US/09/612,925B TIME: 14:24:11

Input Set : A:\sequence listing.txt
Output Set: N:\CRF3\07242002\1612925B.raw

70 <400> SEQUENCE: 3 72 Thr Thr Cys Thr Ala Gly Ala Thr Cys Cys Ala Ala Ala Gly Thr 73 1 76 Ala Ala 80 <210> SEQ ID NO: 4 81 <211> LENGTH: 26 82 <212> TYPE: PRT 83 <213> ORGANISM: Neisseria meningitidis 85 <400> SEQUENCE: 4 87 Gly Gly Cys Gly Gly Thr Thr Cys Thr Gly Cys Cys Gly Ala Thr Thr 91 Ala Ala Gly Gly Ala Thr Cys Cys Gly Ala 92 20 95 <210> SEQ ID NO: 5 96 <211> LENGTH: 146 97 <212> TYPE: PRT 98 <213> ORGANISM: Neisseria meningitidis 100 <400> SEQUENCE: 5 102 Thr Thr Cys Cys Ala Thr Gly Gly Thr Ala Gly Ala Thr Ala Ala Ala 10 106 Ala Gly Ala Ala Thr Gly Gly Cys Thr Thr Thr Ala Gly Thr Thr Gly 20 110 Ala Ala Thr Thr Gly Ala Ala Gly Thr Gly Cys Cys Gly Ala 114 Cys Ala Thr Thr Gly Gly Cys Gly Ala Cys Ala Cys Gly Ala Ala 118 Ala Ala Thr Gly Thr Ala Gly Ala Thr Ala Thr Thr Ala Thr Cys Gly 70 122 Cys Gly Gly Thr Thr Gly Ala Ala Gly Thr Ala Ala Cys Gly Thr 90 85 126 Gly Gly Cys Gly Ala Cys Ala Cys Thr Ala Thr Thr Gly Cys Thr 100 130 Gly Thr Gly Gly Ala Cys Gly Ala Thr Ala Cys Cys Cys Thr Gly Ala 115 120 134 Thr Thr Ala Cys Thr Thr Thr Gly Gly Ala Thr Cys Thr Ala Gly Ala 130 138 Ala Ala 139 145 142 <210> SEQ ID NO: 6 143 <211> LENGTH: 47 144 <212> TYPE: PRT 145 <213> ORGANISM: Neisseria meningitidis 147 <400> SEQUENCE: 6 149 Met Val Asp Lys Arg Met Ala Leu Val Glu Leu Lys Val Pro Asp Ile 150 1 10 153 Gly Gly His Glu Asn Val Asp Ile Ile Ala Val Glu Val Asn Val Gly 157 Asp Thr Ile Ala Val Asp Asp Thr Leu Ile Thr Leu Asp Leu Glu 158 40

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/612,925B

Input Set : A:\sequence listing.txt
Output Set: N:\CRF3\07242002\I612925B.raw

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163 <212> TYPE: PRT
164 <213> ORGANISM: Neisseria meningitidis
166 <400> SEQUENCE: 7
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172 <210> SEQ ID NO: 8
173 <211> LENGTH: 16
174 <212> TYPE: PRT
175 <213> ORGANISM: Neisseria meningitidis
177 <400> SEQUENCE: 8
179 Gly Ala Thr Cys Cys Thr Gly Ala Thr Ala Thr Cys Ala Ala Ala Thr
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180 1
183 <210> SEQ ID NO: 9
184 <211> LENGTH: 15
185 <212> TYPE: PRT
186 <213> ORGANISM: Human immunodeficiency virus type 1
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191 1
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195 <211> LENGTH: 15
196 <212> TYPE: PRT
197 <213> ORGANISM: Human immunodeficiency virus type 1
199 <400> SEQUENCE: 10
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202 1
205 <210> SEQ ID NO: 11
206 <211> LENGTH: 15
207 <212> TYPE: PRT
208 <213> ORGANISM: Human immunodeficiency virus type 1
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213 1
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217 <211> LENGTH: 15
218 <212> TYPE: PRT
219 <213> ORGANISM: Human immunodeficiency virus type 1
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223 Arg Lys Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr
                                        10
           .5
227 <210> SEQ ID NO: 13
228 <211> LENGTH: 15
229 <212> TYPE: PRT
230 <213> ORGANISM: Human immunodeficiency virus type 1
232 <400> SEQUENCE: 13
234 Arg Lys Arg Ile Thr Met Gly Pro Gly Arg Val Tyr Tyr Thr Thr
                                        10
                    5
235 1
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DATE: 07/24/2002

TIME: 14:24:11

RAW SEQUENCE LISTING DATE: 07/24/2002 PATENT APPLICATION: US/09/612,925B TIME: 14:24:11

Input Set : A:\sequence listing.txt
Output Set: N:\CRF3\07242002\1612925B.raw

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 239 <211> LENGTH: 15
 240 <212> TYPE: PRT
 241 <213> ORGANISM: Human immunodeficiency virus type 1
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 245 Ser Ile Arg Ile Gln Arg Gly Pro Gly Arg Ala Phe Val Thr Ile
 246 1
                     5
 249 <210> SEQ ID NO: 15
 250 <211> LENGTH: 15
 251 <212> TYPE: PRT
 252 <213> ORGANISM: Human immunodeficiency virus type 1
 254 <400> SEQUENCE: 15
 256 Thr Ser Ile Thr Ile Gly Pro Gly Gln Val Phe Tyr Arg Thr Gly
 257 1
 260 <210> SEQ ID NO: 16
 261 <211> LENGTH: 15
 262 <212> TYPE: PRT.
 263 <213> ORGANISM: Human immunodeficiency virus type 1
 265 <400> SEQUENCE: 16
267 Arg Gln Arg Thr Ser Ile Gly Gln Gly Gln Ala Leu Tyr Thr Thr
271 <210> SEQ ID NO: 17
272 <211> LENGTH: 5
                                  )invalid response - sel sten/Oon Eval
Summary
Sheet
273 <212> TYPE: PRT
274 <213> ORGANISM: unidentified
276 <400> SEQUENCE: 17
278 Ala Gly Gly Gly Ala
282 <210> SEQ ID NO: 18
283 <211> LENGTH: 141
284 <212> TYPE: PRT
285 <213> ORGANISM: Human immunodeficiency virus type 1
287 <400> SEQUENCE: 18
289 Cys Ala Pro Thr Ser Ser Ser Thr Ala Gln Thr Gln Leu Gln Leu Glu
293 His Leu Leu Leu Asp Leu Gln Ile Phe Leu Ser Arg Gly Ile Arg Ile
                                    25
297 Gly Pro Gly Arg Ala Ile Leu Ala Thr Ala Gly Gly Ala Arg Gln
                                40
301 Ser Thr Pro Ile Gly Leu Gly Gly Ala Leu Tyr Thr Thr Ala Gly Gly
                            55
305 Gly Ala Arg Lys Ser Ile Thr Lys Gly Pro Gly Arg Val Ile Tyr Ala
                        70
309 Thr Ala Gly Gly Ala Arg Lys Arg Ile His Ile Gly Pro Gly Arg
                                        90
313 Ala Phe Tyr Thr Thr Ala Gly Gly Gly Ala Arg Lys Arg Ile Thr Met
               100
                                    105
317 Gly Pro Gly Arg Val Tyr Tyr Thr Thr Ala Gly Gly Gly Ala Ser Ile
318
                               120
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RAW SEQUENCE LISTING DATE: 07/24/2002 PATENT APPLICATION: US/09/612,925B TIME: 14:24:11

Input Set : A:\sequence listing.txt
Output Set: N:\CRF3\07242002\I612925B.raw

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  327 <212> TYPE: PRT
  328 <213> ORGANISM: Human immunodeficiency virus type 1
  330 <400> SEQUENCE: 19
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  336 Gly Gly His Glu Asn Val Asp Ile Ile Ala Val Glu Val Asn Val Gly
                  20
                                      25
 340 Asp Thr Ile Ala Val Asp Asp Thr Leu Ile Thr Leu Asp Leu Asp Ser
                                  40
 344 Arg Gly Ile Arg Ile Gly Pro Gly Arg Ala Ile Leu Ala Thr Ala Gly
         50
 348 Gly Gly Ala Arg Gln Ser Thr Pro Ile Gly Leu Gly Gly Ala Leu Tyr
 349 65
 352 Thr Thr Ala Gly Gly Gly Ala Arg Lys Ser Ile Thr Lys Gly Pro Gly
 356 Arg Val Ile Tyr Ala Thr Ala Gly Gly Gly Ala Arg Lys Arg Ile His
 357
                 100
                                      105
 360 Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Ala Gly Gly Ala Arg
 361
             115
                                 120
                                                     125
 364 Lys Arg Ile Thr Met Gly Pro Gly Arg Val Tyr Tyr Thr Ala Gly
                             135
                                                 140
 368 Gly Gly Ala Ser Ile Arg Ile Gln Arg Gly Pro Gly Arg Ala Phe Val
 369 145
                         150
                                             155
 372 Thr Ile
 376 <210> SEQ ID NO: 20
 377 <211> LENGTH: 202
 378 <212> TYPE: PRT
379 <213> ORGANISM: Human immunodeficiency virus type 1
381 <400> SEQUENCE: 20
383 Met Val Asp Lys Arg Met Ala Leu Val Glu Leu Lys Val Pro Asp Ile
387 Gly Gly His Glu Asn Val Asp Ile Ile Ala Val Glu Val Asn Val Gly
                20
391 Asp Thr Ile Ala Val Asp Asp Thr Leu Ile Thr Leu Asp Leu Asp Ser
                                40
395 Arg Gly Ile Arg Ile Gly Pro Gly Arg Ala Ile Leu Ala Thr Ala Gly
                            55
399 Gly Gly Ala Arg Gln Ser Thr Pro Ile Gly Leu Gly Gln Ala Leu Tyr
403 Thr Thr Ala Gly Gly Gly Ala Arg Lys Ser Ile Thr Lys Gly Pro Gly
                                        90
407 Arg Val Ile Tyr Ala Thr Ala Gly Gly Gly Ala Arg Lys Arg Ile His
                                    105
411 Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Ala Gly Gly Ala Arg
412
            115
                                120
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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/612,925B

DATE: 07/24/2002 TIME: 14:24:12

Input Set : A:\sequence listing.txt
Output Set: N:\CRF3\07242002\I612925B.raw